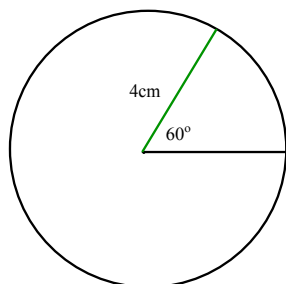


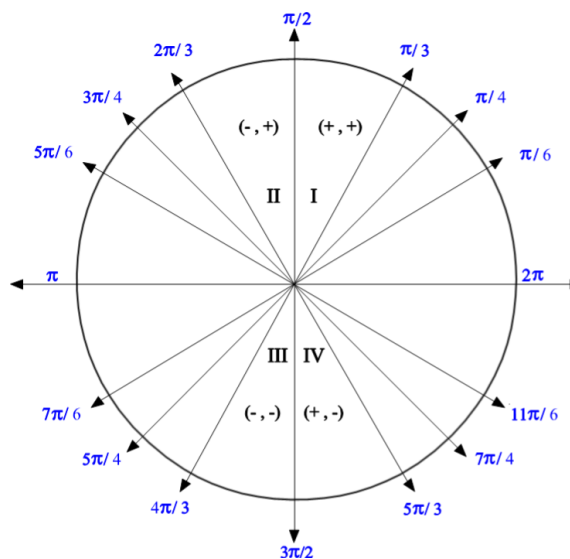
What's a **radian**?



$$\frac{\text{radians}}{2\pi r} = \frac{\text{degrees}}{360}$$

Radians are the fraction of the circumference that are cut off by a certain angle.

Radians on the Unit Circle



Homework

Arc Length (s): $s = r\theta$ r : radius and θ = radian measure

A circle has a diameter of 10 meters. Given the central angle measure, find the length of the intercepted arc.

21.) 45 radians

If $d = 10$ m, then $r = 5$ m

$$s = (5)(45) = 225\text{m}$$

225 m is the length of the piece of the circle cut off by 45 radians.